

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Rohm and Haas Chemical LLC
Attn: Stan Zagula
2401 East Pratt Boulevard
Elk Grove, Illinois 60007

Application No.: 72100457

I.D. No.: 031440AAZ

Applicant's Designation:

Date Received: May 27, 2004

Subject: Adhesive and Polymer Production

Date Issued: October 23, 2006

Expiration Date: October 23, 2011

Location: 2401 East Pratt Boulevard, Elk Grove Village

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 8 process vessels (EP25, EP26, EP29, EP30, EP32, EP34, EP37, EP38) each controlled by condensers, 15 storage tanks (EP3-EP17) with vapor recovery, bucket elevators with baghouse (EP18), 1 repackaging operation (EP39), 1 morprime operation (EP40), 1 drum mixer (EP41) and Solvent Meter Vapor Condenser (EP42) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of volatile organic material 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs. As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit.
 - ii. This permit is issued based upon the plant not being subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart QQ: Miscellaneous Formulation Manufacturing Processes and Subpart TT: Other Emission Units. This is consequence of the federally enforceable production and operating limitations, which restrict a potential to emit to less than 25 tons per year.
 - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

- c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 218.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201
- b. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b) (2).
- c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G: Use of Organic Material, shall apply only to photochemically reactive material.
- 3. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 4a. Operation of equipment shall not exceed the following limits:

| <u>Item of Equipment</u> | Vapor Pressure of VOMs Referenced to 50°F |
|--------------------------|--|
| | <u>(psia)</u> |
| EP3 | 2.83 |
| EP4 | 2.83 |
| EP5 | 2.83 |
| EP5 | 2.83 |
| EP6 | 2.83 |
| EP7 | 2.83 |
| EP8 | 2.83 |
| EP9 | 2.83 |
| EP10 | 2.83 |
| EP11 | 2.83 |
| EP12 | 2.83 |
| EP13 | 2.83 |

| <u>Item of Equipment</u> | Vapor Pressure of VOMs Referenced to 50°F (psia) |
|--------------------------|--|
| EP14 | 2.83 |
| EP15 | 2.83 |
| EP16 | 2.83 |
| EP17 | 2.83 |

- b. The total throughput for the above tanks shall not exceed 250,000 gallons/month and 2.5 million gallons/year.
- c. The total VOM emissions from the storage tanks listed in Condition 4a, including fugitive emissions from leaks, shall not exceed 0.1 ton/month and 0.67 tons/year.
- d. Operation of the source shall not exceed the following limits:

| <u>Item of Equipment</u> | Total Combined Production | | Total Combined VOM Emissions | |
|--------------------------|------------------------------|-----------------|---------------------------------|------------------|
| | <u>(Lbs/Month)</u> | <u>(Lbs/Yr)</u> | <u>(Tons/Mo)</u> | <u>(Tons/Yr)</u> |
| Process Equipment* | 2,650,000 | 26,500,000 | 2.41 | 24.1 |

* The process equipment consists of: Mixer 2 EP25, Mixer 3 EP26, Mixer 7 EP29, Mixer 8 EP30, Mixer 10 EP32, Mixer 15 EP34, Mixer 19 EP37, Mixer 20 EP38, Refilling EP39, Morprime process EP40, Drum mixer EP41, Solvent Meter Vapor Condenser EP42

- e. The emissions of particulate matter from all the process tanks listed in Special Condition 4(d) above shall not exceed 2.2 tons/year.
 - f. Compliance with annual limits shall be determined from a running total of 12 months of data.
5. The Permittee shall notify the Illinois EPA of any new solvents stored in the tanks if the vapor pressure exceeds that listed in Special Condition #4(a) or the new solvent is a listed Hazardous Air Pollutant.
 6. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
 - 7a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source

category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- b. The Permittee shall maintain monthly records of the following items:
 - i. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
 - ii. Name of solvents contained in each tank, the vapor pressures and throughputs;
 - iii. Storage tank throughput (gallons/month);
 - iv. Name and amount of VOM and HAP containing materials used including VOM and HAP content (% by weight and lbs/month);
 - v. Process equipment material throughput (tons/month);
 - vi. Monthly and annual emissions of NO_x, PM, PM₁₀, VOM, and HAPs (tons/month and tons/year) with supporting calculations in order to demonstrate compliance with the emission limitations included within this Permit.

- vii. Maintain a leak and repair log including date and time of preventative maintenance, date and time of leak, and date, time, and nature of corrective actions take; and
- viii. Record temperature of the cooling water supplied to the condensers and the temperature of the cooling water returned to the cooling tower.
- c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

Please note that this permit is issued for renewal including the removal of the following equipment from the FESOP: Catalyst tank EP 23, Kettle Tank EP31, Mixer 1-EP24, Mixer 5-EP27, Mixer 6 - EP 28, Mixer 11 - EP 33, Mixer 16 - EP 35, Mixer 17 - EP36, and four AGST's EP19-EP22

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If you have any questions on this, please call Ernie Kierbach at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:psj

cc: IEPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the adhesive and specialty polymer manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario that results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Additionally maximum emissions of VOM are below the 25 tons per year to remain below 35 IAC 218 Subpart QQ and Subpart TT applicability levels. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

| E M I S S I O N S (Tons/Year) | | | | | | |
|----------------------------------|-----------|-----------------------|------------------------|------------|-----------------------|--------------------------|
| <u>Emission Unit</u> | <u>CO</u> | <u>NO_x</u> | <u>PM₁₀</u> | <u>VOM</u> | <u>Single HAP</u> | <u>Combined HAPs</u> |
| Process Equipment | | | 2.2 | 24.10 | | |
| Storage Tanks Including Leaks | | | | 0.67 | | |
| Totals | 0 | 0 | 2.2 | 24.77 | < 10 | < 25 |

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